



41

12/14  
RECEIVED  
OCT 22 2003  
TC 1700

Examiner Kriellon Sanders  
United States Department of Commerce  
US Patent and Trademark Office

Docket No. 2934-0103P

Control No. 09/820,916

Dear Examiner Sanders:

I hope for your understanding ---- I'm the inventor, not an attorney. I'm responding to the case because of financial reasons. I would have an attorney if I could afford it, but I can't.

Referring to page 2 of your review, you ask for a restriction.

I choose **option I**. "Claims 1-42 and 70-76, 95, and 96, drawn to a compostable and degradable polymer composition, classified in class 524, subclass 47".

I believe the only other task is to make a selection of one component from each of A, B, and D.

- A. polyesteramide -- I elect item v) on page 124 (copy of page enclosed)
- B. I elect starch derivatized with ethyleneimine, as shown on page 123 (copy enclosed)
- C. Crosslinker ---- 3-(trimethoxysilyl)-1-propanamine

Norman Holy  
October 15, 2003

*Norman Holy*

## Claims:

1           1.    A    compostable    and/or    degradable    polymer  
2 composition, comprising:  
3           polymer (A) which is a polyesteramide copolymer;  
4           polymer (B) which is at least one polymer selected from  
5 the group consisting of polyethylenevinyl alcohol, polyvinyl  
6 alcohol, polyester, starch, starch derivative, cellulose,  
7 polyethylene glycol, chitin, amylose, amylopectin, ~~starch~~  
8 ~~derivatized with ethyleneimine~~, cellulose derivatized with  
9 ethyleneimine, polysaccharides derivatized with  
10 ethyleneimine, lignin derivatized with ethyleneimine,  
11 farinaceous materials derivatized with ethyleneimine and  
12 mixtures thereof;  
13           component (C) which is a plasticizer; and  
14           component (D) which is a crosslinking agent;  
15           wherein the polymer composition comprises 0 to 60 wt%  
16 of polymer (B), 0 to 25 wt% of component (C), and 0 to 5 wt%  
17 of component (D);  
18           wherein all wt% values are based upon the total weight  
19 of the polymer composition; and  
20           with the proviso that the polymer composition must  
21 contain at least one of polymer (B) and component (D).

1           2.    The    compostable    and/or    degradable    polymer  
2 composition according to claim 1, wherein the amide content  
3 is 80 to 20 wt% of the polyesteramide copolymer.

1           3.    The    compostable    and/or    degradable    polymer  
2 composition according to claim 1, wherein the ester content  
3 is 20 to 80 wt% of the polyesteramide copolymer.

1           4.     The compostable and/or degradable polymer  
2 composition according to claim 1, wherein polymer (A) is  
3 prepared from at least one of the following sets of  
4 reactants:  
5           i) cyclic amide; dicarboxylic acid or ester and  
6 aliphatic diol;  
7           ii) aliphatic polyamide and a cyclic ester, a diol  
8 or both;  
9           iii) aliphatic diamine, dicarboxylic acid or ester  
10 and aliphatic diol;  
11           iv) cyclic amide, dicarboxylic acid or ester,  
12 tricarboxylic acid or ester; and aliphatic diol;  
13           v) cyclic amide and cyclic ester;  
14           vi) aminocarboxylic acid, dicarboxylic acid or  
15 ester and aliphatic diol;  
16           vii) aliphatic diamine and/or triamine, aliphatic  
17 diol, dicarboxylic acid or ester and cyclic amide;  
18           viii) aliphatic polyamide and polyester;  
19           ix) polymerized vegetable oil and polyester,  
20 aliphatic diol or both;  
21           x) aliphatic diamine and aliphatic diol;  
22           xi) cyclic amide, aminocarboxylic acid, and  
23 hydroxycarboxylic acid;  
24           xii) cyclic amide and hydroxycarboxylic acid;  
25           xiii) aliphatic polyamide and hydroxycarboxylic  
26 acid;  
27           xiv) cyclic amide, cyclic ester, dicarboxylic acid  
28 or ester and aliphatic diol;  
29           xv) a triol/diol/aliphatic dicarboxylic acid  
30 crosspolymer and a  
31 polyamide; and

3 is selected from the group consisting of ammonium  
4 polyphosphate and zinc pyrophosphate.

1 29. The compostable and/or degradable polymer  
2 composition according to claim 27, wherein the degrading aid  
3 is in a range of 0.1 - 5 wt%.

1 30. The compostable and/or degradable polymer  
2 composition according to claim 1, further comprising  
3 component (D) which is a crosslinking agent.

1 31. The compostable and/or degradable polymer composition  
2 according to claim 30, wherein the crosslinking agent is  
3 selected from the group consisting of a triamine, triol,  
4 jeffamine, polyethyleneimine, multifunctional amines,  
5 glycerol, sorbitol, EVOH, PVOH, triaminopyrimidines,  
6 tetraazacyclo-tetradecane, tricarboxylic acid or ester,  
7 tetracarboxylic acid or ester, methylene bis(4-phenyl  
8 isocyanate), vinyltrimethoxysilane, diethylene glycol  
9 diglycidyl ether, epichlorohydrin,  
10 1,1,3,3,5,5,7,7,9,9,11,11-dodecamethyl-1,11-bis(4-  
11 (oxiranylmethoxy)phenyl)-Hexasiloxane, 3-(trimethoxysilyl)-  
12 1-Propanamine, zinc pyrophosphate, zinc oxide and mixtures  
13 thereof.

1 32. The compostable and/or degradable polymer  
2 composition according to claim 30, wherein the crosslinking  
3 agent is selected from the group consisting of

4 3,3-dimethoxy-7,9-dimethyl-7-((nonamethyltetra-  
5 siloxanyl)oxy))-9-((trimethylsilyl)oxy)-2,8,13-trioxa-3,7,9-  
6 trisilapentadecan-15-ol;

7 1,1,1,3,3,5,5,7,7,9,11,13,15,17,19,19,